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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/820,933	03/30/2001	Hideyo Makino	204398US2	4152
22850	7590	10/14/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			PHAM, HAI CHI	
			ART UNIT	PAPER NUMBER
			2861	
DATE MAILED: 10/14/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/820,933

Applicant(s)

MAKINO, HIDEYO

Examiner

Hai C. Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,8-11,13-16,18-23,25-30 and 32-34 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

- 5) ☒ Claim(s) 1,3-6,8-11,13-16,18-23 and 25-30 is/are allowed.

- 6) ☒ Claim(s) 32-34 is/are rejected.

- 7) ☐ Claim(s) _____ is/are objected to.

- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☒ All b) ☐ Some * c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

FINAL REJECTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claim 32 is rejected under 35 U.S.C. 102(e) as being anticipated by Aoki et al. (U.S. 6,366,384).

Aoki et al. discloses a multi-beam scanning device comprising a recording medium (photoconductor 20), a laser diode array (semiconductor laser arrays 111, 112) multi-beam having at least three light emitting points arranged in a package at an equal interval from each other (each of the semiconductor laser arrays having m number of light emitting points arranged in a row at equal interval p from each other) and configured to emit respective laser beams that form corresponding laser beam spots on the recording medium at a minimum recording interval (e.g., scanning line pitch L for the

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highest 1200 dpi resolution), wherein the laser beams from the at least three light emitting points scan the recording medium in a main scanning direction while being at least one of on and off so as to form a light image having the minimum recording interval in the recording medium, the equal interval is smaller than the minimum recording interval (at the minimum recording interval or scanning line pitch of 21.2 μm for the resolution of 1200 dpi, the semiconductor laser array having light emitting points spaced at 7 μm or 14 μm can be used) (col. 9, lines 29-41), and the at least three light emitting points are arranged such that the corresponding laser beams spots on the recording medium are arranged substantially in a line in a direction orthogonal to the main scanning direction (the multi laser beams forming linear image on the scanning surface in accordance with a scanning start synchronizing signal wherein the laser beam spots are aligned in the sub-scanning direction) (Figs. 1, 5-8).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki et al. in view of Hamada et al. (U.S. 6,246,463).

Aoki et al. discloses all the basic limitations of the claimed invention except for any one of the laser beams being used as a clock laser beam configured to determine a timing of starting each main scanning.

Hamada et al. teaches a multi-beam scanning apparatus in which any one of the laser beams (301a-301c) is used as a clock laser beam (reference beam) configured to determine a timing of starting each main scanning via the delay time setting circuit such that the beams spots (401a-401c) are aligned along the start line (610) in a direction orthogonal to the main scanning direction (Figs. 6A-6C).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Aoki et al. with the aforementioned teaching of Hamada et al. The motivation for doing so would have been to provide a simple method of aligning the scanning start positions for all laser beams emitted at one time for every scanning process while increasing the life of the semiconductor laser array, as suggested by Hamada et al.

5. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki et al. in view of Nakayama (JP 5-6077).

Aoki et al. discloses all the basic limitations of the claimed invention except for the abnormal lighting detector, and the laser beam changer configured to change the clock laser beam to any one of the laser beams in case of detected abnormality.

However, Nakayama discloses an image forming device using plural light sources, and a detecting device (29) for detecting an abnormality in the emitting state of the light sources (25) such that only normal light sources are used for forming image.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Aoki et al. with the aforementioned teaching of Nakayama for the purpose of adjusting the scan timing of each of the laser beams.

Allowable Subject Matter

6. Claims 1, 3-6, 8-11, 13-16, 18-23 and 25-30 allowed.

7. The following is an examiner's statement of reasons for allowance: the primary reason for the indication of the allowability of claims 1, 6, 11, 16, 21, 27-30 is the inclusion therein, in combination as currently claimed, of the limitation "the holder and the bracket define voids configured to permit rotation of the holder relative to the bracket before securing the holder to the bracket", which is not found taught by the prior art of record considered alone or in combination.

Claims 3-5, 8-10, 13-15, 18-20, 22-23 and 25-26 are allowed because they are directly or indirectly dependent from above-mentioned claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

8. Applicant's arguments with respect to claims 32-34 have been considered but are moot in view of the new grounds of rejection as presented in this Office action.

Conclusion

9. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai C. Pham whose telephone number is (571) 272-2260. The examiner can normally be reached on M-F 8:30AM - 5:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Talbott can be reached on (571) 272-1934. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



HAI PHAM
PRIMARY EXAMINER

October 12, 2005